



State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt
Governor

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June 11, 2001

CERTIFIED RETURN RECEIPT
7000 0520 0021 7582 9873

W. Dan Proctor, Project Manager
Unico, Incorporated
951 East 830 South
Pleasant Grove, Utah 84062

Re: Initial Review of Notice of Intention to Commence Large Mining Operations, Unico Mines, Deer Trail Mine, M/031/003, Piute County, Utah

Dear Mr. Proctor:

The Division has completed a review of your draft Notice of Intention to Commence Large Mining Operations for the Deer Trail Mine, located in Piute County, Utah, which was received March 26, 2001. After reviewing the information, the Division has the following comments that need to be addressed before tentative approval may be granted. The comments are listed below under the applicable Minerals Rule heading. Please format your response in a similar fashion. Please provide a response to this review July 16, 2001.

The Division will suspend further review of the mine NOI until your response to this letter is received. If you have any questions in this regard please contact me, Lynn Kunzler, Tom Munson or Doug Jensen of the Minerals Staff. If you wish to arrange a meeting to sit down and discuss this review, please contact us at your earliest convenience. Thank you for your cooperation in completing this permitting action.

Sincerely,

D. Wayne Hedberg
Permit Supervisor
Minerals Regulatory Program

jb

Attachment: Review

cc: Steve Winslow, USFS w/attachment
m31-03-rev

R647-4-111 - Reclamation Practices

111.8 All roads & pads reclaimed

Waste dumps will require grading to a 3h:1v slope, topsoil replacement, contour ripping and seeding upon closure. (DJ)

111.9 Dams & impoundments left self draining & stable

A variance under Rule R647-4-111 will need to be applied for to allow the fresh water pond to remain after the closure of the facility. (See comments under R647-4-112). (DJ)

111.11 Structures & equipment buried or removed

Please see comments under R647-4-110.3. (LK)

R647-4-112 - Variance

The operator will need to request a variance from Rules R647-4-111 (Reclamation Practices) to allow the fresh water pond to remain after reclamation by submitting the following information:

- 1.11. The rule which the variance is requested from: (R647-4-111.9 – Dams and Impoundments to be self-draining and stable.)
- 1.12 A description of the specific variance requested and a description of the area affected by the variance request; show this area on the reclamation treatments map.
- 1.13 Justification for the variance

R647-4-113 - Surety

The Division acknowledges that the U.S. Forest service presently holds a \$24,000 bond on the Deer Trail Mine and the Division holds a \$19,000 transitional surety on the millsite. Because these two sites have been consolidated, a single surety under both the Division of Oil, Gas, and Mining and the U.S. Forest Service should be considered. This will be resolved at the time the final surety is calculated. (DJ)

A generic bond estimation sheet is attached to assist the operator in completing the surety.



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REVIEW OF NOTICE OF INTENTION TO COMMENCE LARGE MINING OPERATIONS

Unico Mines
Deer Trail Mine

M/031/003
June 11, 2001

R647-4-105 - Maps, Drawings & Photographs

105.2 Surface facilities map

Please describe the dimensions and construction of all buildings that will be located at the millsite, including any proposed for construction. (DJ)

105.3 Drawings or Cross Sections (slopes, roads, pads, etc.)

Please provide cross sections of all processing ponds, fresh water ponds, etc. (TM)

R647-4-106 - Operation Plan

106.2 Type of operations conducted, mining method, processing etc.

Will there be quality assurance on the HMS to assure that the waste rock to be sold as a crushed rock product will not contain sufficient amounts of mineralization to cause off-site contamination? (DJ)

Please provide a list of the equipment contained in and used with the HMS. (DJ)

106.3 Estimated acreages disturbed, reclaimed, annually.

The fresh water pond acreage was not noted in the areas. Was it included under other features? When noting estimated acreages for tailings pond, please include areas affected by these items as a part of the total acreage. (DJ)

The soil stockpiles occupy approximately 0.5 acres. Is this included in the total acreage? (DJ)

Have the disturbances for the water line from Alunite Springs and the buried power lines to the proposed load out area been included in the total disturbed acreages? (DJ)

106.5 Existing soil types, location, amount

The NOI indicates that approximately 10 inches of soil over a 10-acre area is available for salvage. Please note, this will provide approximately 13,400 cubic yards of soil, not the 5,000 yards identified. Please correct this figure. (LK)

Please provide a laboratory analysis of the soil materials that will be used for reclamation. This analysis needs to include: pH, texture, % organic matter, electrical conductivity (EC), cation exchange capacity (CEC), sodium absorption ratio (SAR), total nitrogen, available phosphorus (as P_2O_5), and potassium (as K_2O). (LK)

106.6 Plan for protecting & redepositing soils

The soil stockpile located near the HMS seems to become a part of the HMS operation when it is constructed. Will this stockpile be relocated before the start of the HMS operation? If so please note the new location. The location of the soil stockpile directly below the planned tailings pond is unacceptable. If the dam should fail the pile would become contaminated and Unico would be unable to use this material for reclamation. (DJ)

106.8 Depth to groundwater, extent of overburden, geology

The operator plans on drilling wells to supply drinking water for the site. Please provide more information on what geologic formations are known to exist in the area that would supply drinking water. (TM)

106.9 Location & size of ore, waste, tailings, ponds

The plan indicates that the size of the tailings ponds to be located at the site are 110' x 75' and 300' x 180' and the size of the fresh water holding pond will be 80' x 80'. Please provide more design details for these structures describing: 1) how they will be built and to what specifications, 2) where the spillways will be located, and 3) in case of failure, where the tailings will go. (TM)

Using the scaled Milling Facilities map, the areas indicated appear to be the storage area of each feature. The total area disturbed by each feature should be used when noting disturbed acreage. (DJ)

R647-4-107 - Operation Practices

107.2 Drainages to minimize damage

Please describe any drainage crossings by roads within the property and how the drainage will be protected. (TM)

107.3 Erosion control & sediment control

Is all storm water runoff from the disturbed areas routed to impoundments to prevent excess sediment from leaving the site? Please provide a better description on a plate, showing the direction of storm water runoff. (TM)

107.4 Deleterious material safely stored or removed

Secondary containment for deleterious material should be 110% of capacity. (DJ)

107.5 Suitable soils removed & stored

Due to the limited availability of topsoil, use of topsoil material to level areas is not recommended. (DJ)

107.6 Concurrent reclamation

Due to the metal and chemical contamination of the tailings, an overburden cap may be required before soil is placed on these areas. Please provide documentation from Dept. of Environmental Quality (Div. of Water Quality) as to the type of cap that they will require for closure of this facility. (DJ)

R647-4-109 - Impact Assessment

109.1 Impacts to surface & groundwater systems

There is mention of an NPDES discharge point related to the fresh water pond and discharge from a storm event. Please provide a copy of that permit in the plan. The plan describes monitoring of the springs down stream from the tailings impoundment but does not provide locations of where these springs are located and it does not describe what water quality parameters will be monitored. Please provide this information. (TM)

The Plan also describes monitoring waters upstream from the site but does not provide locations of sampling points or the actual water quality parameters to be sampled and at what frequency. Please provide this information. (TM)

The ponds and tailing impoundments are listed as non-discharging facilities. In case of a major storm event or emergency overflow, where will the discharge go and what are the potential impacts? (TM)

109.4 Slope stability, erosion control, air quality, safety

Air quality permits will need to be obtained from the Utah Division of Air Quality. (DJ)

R647-4-110 - Reclamation Plan

110.1 Concurrent & post mining land use

The Division cannot approve leaving structures (i.e. buildings) for the post mining land use until at the time of closure. At that time, if there is a viable alternative use (other than mining related) for these buildings, the Division can waive reclamation requirements. Please plan on total reclamation of the site for this operation. (LK)

110.2 Roads, highwalls, slopes, drainages, pits, etc., reclaimed

Please indicate the overflow location for the fresh water pond on the Deer Trail Mine and Mill Operation map. (DJ)

Will any road crossings be reconstructed upon reclamation? If so, please provide the necessary plans. (TM)

110.3 Description of facilities to be left (post mining use)

Please refer to comments under R647-4-110.1. The Division cannot consider an alternative use for the buildings until at the time of reclamation. At that time, you will need to provide documentation for the alternative use and that the buildings are suitable for the intended alternative use. (LK)

110.4 Description or treatment/disposition of deleterious or acid forming material.

Please describe Unico's plans should the waste dump begin to generate acid drainage. Reactivity of materials being placed on the waste dump in the future cannot be predicted and materials being placed on the dump will contain metal sulphides (potential acid formers). (DJ)

110.5 Revegetation planting program

Scarification of replaced soils by tracking over the surface is not an acceptable method of soil preparation. Plowing the surface with the track hoe bucket is acceptable and is expected to leave a rough surface. (LK)

The plan indicates that the oversize material from the dump screening at the Upper Deer Trail Mine is to be placed in a terraced central dump, terraced, mulched and seeded. Soils should be harvested from the areas below this central dump and placed over the dump material to assure revegetation success of this effort. (DJ)

R647-4-111 - Reclamation Practices

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